EMD-126US

Appln. No.: 10/554,028

Amendment Dated April 26, 2010

Reply to Office Action of February 26, 2010

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 - 6. (Canceled)

- 7. (**Currently Amended**) An agriculturally acceptable A composition for initiating increasing an early flowering number or budding an early fruit number in a nonleguminous plant comprising an effective amount of at least one a lipo-chitooligosaccharide (LCO) with at least one agriculturally acceptable carrier in a concentration effective to increase the flower number or fruit number in the plant within four weeks following an application of the composition to the plant.
- 8. (**Currently Amended**) A method for <u>initiating increasing an early_flowering</u>, <u>budding</u> or fruiting <u>number</u> in a nonleguminous plant comprising applying to <u>foliage of the plant an</u> effective amount of at least onea lipo-chitooligosaccharide (LCO) at a concentration of from about 1 ng to about 1000 ng per plant with one or more agriculturally acceptable carrier, wherein flowering, budding or fruiting is initiated early in the nonleguminous plant.
- 9. 13. (Canceled)
- 14. (Canceled)
- 15. (Canceled)
- 16. (Canceled)
- 17. (**Previously Presented**) The method of claim 8, wherein the nonleguminous plant is of the family *Brassicaceae*, *Solonaceae*, *Chenopodiaceae*, *Asteraceae*, *Malvaceae*, *Cucurbitaceae*, or *Poaceae*.
- 18. (**Currently Amended**) The method of claim 8, wherein the one or more lipochitooligosaccharideLCO is applied at a concentration of from about 10 ng per plant to about 1000-100 ng per plant.

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- 19. (**Currently Amended**) The method of claim <u>188</u>, wherein the nonleguminous plant is a tomato plant, a pepper plant, or <u>an ornamental a strawberry</u> plant.
- 20. (**Currently Amended**) The method of claim 18, wherein the one or more lipochitooligosaccharideLCO is applied at a concentration of from about 10-50 ng per plant to about 300-75 ng per plant.
- 21. (**Currently Amended**) A method for increasing increasing an early flower number—or associated yield—in a nonleguminous plant comprising applying to foliage of the plant an effective amount of at least onea lipo-chitooligosaccharide (LCO) at a concentration of from about 1 ng to about 1000 ng per plant—with one or more agriculturally acceptable carrier, wherein flower number or associated yield is increased in the nonleguminous plant.
- 22. (**Previously Presented**) The method of claim 21, wherein the nonleguminous plant is of the family *Brassicaceae*, *Solonaceae*, *Chenopodiaceae*, *Asteraceae*, *Malvaceae*, *Cucurbitaceae*, or *Poaceae*.
- 23. (**Currently Amended**) The method of claim 21, wherein the one or more lipochitooligosaccharideLCO is applied at a concentration of from about 1000 per plant to about 1000 ng per plant.
- 24. (**Currently Amended**) The method of claim $\frac{23}{21}$, wherein the nonleguminous plant is a tomato plant, pepper plant, or ornamental plant.
- 25. (**Currently Amended**) The method of claim 2321, wherein the one or more lipochitooligosaccharideLCO is applied at a concentration of from about 10-50 ng per plant to about 300-75 ng per plant.
- 26. (Canceled)
- 27. (Canceled)
- 28. (**Currently Amended**) A method for initiating increasing an early flowering, budding or fruiting number in a nonleguminous plant comprising applying to foliage of the plant an effective amount of the composition of claim 7.

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29. (**Currently Amended**) A method for increasing an early flower number or associated yield in a nonleguminous plant comprising applying to foliage of the plant an effective amount of the composition of claim 7.

- 30. (Previously Presented) The method of claim 8, wherein the non-leguminous plant is a tomato plant.
- 31. (Canceled)
- 32. (Canceled)
- 33. (**New**) The composition of claim 7, wherein the nonleguminous plant is a tomato plant.
- 34. **(New)** The method of claim 8, wherein the step of applying an LCO comprises applying a first dose of LCO and a second dose of LCO, wherein the second dose is applied about two weeks after the first dose.
- 35. (**New**) The method of claim 21, wherein the step of applying an LCO comprises applying a first dose of LCO and a second dose of LCO, wherein the second dose is applied about two weeks after the first dose.
- 36. (New) The method of claim 8, comprising applying the LCO to the foliage of the plant.
- 37. (New) The method of claim 21, comprising applying the LCO to the foliage of the plant.
- 38. (**New**) The method of claim 8, wherein the fruit number of the plant is increased within four weeks following said application.
- 39. **(New)** The method of claim 21, wherein the flower number of the plant is increased within four weeks following said application.